

DRILPLEX HDD Viscosifier Rheology

600 rpm 110 cP

300 rpm 81 cP

Plastic viscosity 29 cP

Yield point 52 lbf/ft²

10 s 50 lbf/ft²

10 min 52 lbf/ft²

Background

When Schlumberger learned an operator was concerned about hole cleaning and packing off in a key drill hole being cored from surface, DRILPLEX HDD viscosifier was recommended by M-I SWACO, a Schlumberger company, for its properties of highly shear-thinning ability and ceasing to flow as it enters fractures of spaces between the rock.

Technology

- DRILPLEX HDD* viscosifier

DRILPLEX HDD Viscosifier Stabilizes Collapsing Formation

Problematic well drilled to TD with 80% core recovery



Following approximately 800 galUS [3,032 L] of the viscosifier being pumped, drilling resumed and torque decreased from 3,000 psi to 1,500 psi [20.7 MPa to 10.3 MPa] and the well was drilled to planned TD successfully. The DRILPLEX HDD viscosifier achieved hole cleaning and target viscosity, holding the gravel in place.